Annexure-A

The tenderers shall furnish the following details with necessary enclosures along with the Technical Bid.

Sl. No	Particulars	Details to be furnished by the firm
1.	EMD of Rs.6,97,200/- to be paid along with the tender in KPP- portal by following modes: 1. Credit card 2. Direct debit of 3. NEFT 4. Over the counter	Tenderers claiming exemption of EMD under NSIC shall contact KPP-Portal for further assistance, as tender inviting authority has not been provided with any options for enabling EMD exemption while uploading tenders.
2.	a) The tenderer should be a Manufacturer who must have manufactured, tested and supplied 6000liters & above capacity combination Machines similar to the types, size and Complexity as specified in the schedule of requirement upto at least 6Nos. to any Government Organization (End user) in any one of the last three years (2023-24 to 2025-26) (Necessary supply orders, performance certificates and 3rd party inspection certificates are to be enclosed). OR b) The tenders Participating as authorized representative/agent(Dealer) of a manufacturer meeting with the above requirements in full will also be considered provided: i) The manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per conditions of contract. ii)The tenderer as authorized representative(Dealer) should have satisfactorily supplied, 6000liters & above capacity combination machines similar to the type, size and Complexity as specified in the schedule of requirement upto at least 3Nos. to any Government Organization(End user) in any one of the last three financial years(2023-24 to 2025-26)(Necessary supply orders, performance certificates and 3rd party inspection certificates are to be enclosed).	Particular year during which the stipulated supplies are made with the details are to be furnished in Annexure-B. Copies of supply orders and performance certificate and 3rd part inspection certificate issued by the End user are to be enclosed in the absence of which the tenders will not be considered for further evaluation. Joint Venture Tenders are not acceptable

	OR c) i. In case of Micro, Small & Medium Enterprises as per G.O No the tenderer should enclose relevant Certificate issued by Competent Authority in the absence of which the tenderers will not be considered for further evaluation. ii. If the tenderer be a Micro & small Enterprises as per G.O.must have manufactured, tested and supplied 6000liters & above capacity combination machines similar to the type, size and complexity as specified in the schedule of requirement upto at least 4Nos. of Combination machines to any Government organization (End user) in any one of the last two financial year(2024-25 to 2025-26) (Necessary supply orders, Performance Certificates and 3rd party inspection certificates are to be enclosed)	
3.	The Tenderer (Manufacturer/ Dealer) should possess a annual financial turnover of Rs.929.60lakhs during the last three preceding financial years (2023-24 to 2025-26). Based on G.O for Micro & Small Enterprises should possess a annual financial turnover of Rs.232.40Lakh during the last 2 preceding financial year(2024-25 to 2025-26).	Respective Balance sheets of only those two financial years during which the turnover is more than the required are to be enclosed along with a certificate issued by a Chartered Accountant
4.	The tenderers participating in the above tender has a reputed manufacturer or authorized dealer should have the experience of Equipment Maintenance of minimum 5Nos. Combination machines in any one of the last Five financial years (2021-22 to 2025-26).	Particular year during which the stipulated supplies are made with the details are to be furnished in Annexure-B. Copies of supply orders and performance certificate and 3rd part inspection certificate issued by the End user are to be enclosed in the absence of which the tenders will not be considered for further evaluation.
5.	The Tenderer should demonstrate the availability of Liquid Assets and/or availability of Credit Facility of not less than Rs.139.44 Lakh(Credit Line/Letter of Credit/Certificates from Nationalised /Scheduled Bank)	The Tenderer should submit the Banker's Certificate invariably indicating tender number and the prescribed amount
6.	Tenderer shall possess an Assessed Available Tender Capacity (AxN-B) not less than 8Nos. suctions	Certificate issued by Govt. Of India Ministry of Micro, Small & Medium Enterprises or by any relevant Govt.

	cum jetting Machine, Where, A=Licenced capacity for manufacturing of Vehicle. N=Number of years prescribed for completion of supplies for which tenders are invited. i.e., 12 months B= Number of existing commitments to be supplied during the next 1 year.	Organization concerned with Industries is to be enclosed. Agreed/Disagreed (If disagreed, the offer of the tenderer will not be considered for evaluation)
7	The tenderer must have ISO 9001 and 14001 certifications with validity since last one year. Latest audited certification must be submitted.	Latest audited Certificate issued by the Concerned Department in validity need to be submitted.
8	Documentary evidence showing authorized service centre with registration of certificate with a Bangalore city limits.	Service station registration certificate issued by the concerned department need to be submitted.
9	Trade certificate issued by RTO, Government of Karnataka.	Trade certificate issued by RTO in Form-17 must be uploaded.
10	The Tenderer should submit the technical specification and drawings of the equipment's offered.	Agreed/Disagreed (If disagreed, the offer of the tenderer will not be considered for evaluation)
11.	The Tenderer should agree to supply Sewer Cleaning Equipment's as per Clause 1.20 & Table 2.2 and deliver the same within 12 months.	Agreed/Disagreed (If disagreed, the offer of the tenderer will not be considered for evaluation)
12.	The tenderer should give a guarantee of One year for the Sewer Cleaning Equipments and enclose the Schedule of Guarantee Table 2.3 duly signed.	Agreed/Disagreed (If disagreed, the offer of the tenderer will not be considered for evaluation)
13	The Tenderer should furnish a self certificate that they were never Black listed in past five years anywhere in India or outside.	Furnished/not furnished (If Not furnished, the offer of the tenderer will not be considered for further evaluation.)
14.	Firm should furnish history of criminal and litigation record.	Furnished/not furnished (If Not furnished, the offer of the tenderer will not be considered for evaluation.)
15.	Tenderer should furnish Affidavit about correctness of the details furnished.	Furnished/not furnished (If Not furnished, the offer of the tenderer will not be considered for evaluation.)
16.	The tenderer should furnish a Calculation Sheet to establish that the HP available with RPM at the output shaft of the P.T.O will suffice the power required when both jetting & suction	Furnished/not furnished (If Not furnished, the offer of the tenderer will not be considered for evaluation.)

	pumps are in operations.	
17.	The Tenderer should agree to all terms and conditions of the tender.	Agreed/Disagreed (If disagreed, the offer of the Tenderer will not be considered for evaluation)

Sd/-

Signature of Tenderer **Chief Engineer(IP,R&D)**

BWSSB

GENERAL TERMS AND CONDITIONS

1.	Tenders through KPP- Portal in two cover system one for Technical Bid and the other for Financial Bid are invited for the supply of 8Nos. of Combination machines (Suction-cum-Jetting machines) of 6,000 Litres capacity (to carry 4,000 ltrs., of water and 2,000 ltrs., of sewage) to be mounted on suitable BS-VI chassis provided by Board from Manufacturers /authorized representative/agent of a manufacturer with the following eligibility criteria: a) The tenderer should be a Manufacturer who must have manufactured, tested and supplied6000liters & above capacity Combination Machines similar to the types, size and Complexity as specified in the schedule of requirement upto at least 6Nos. to any Government Organization (End user) in any one of the last three years (2023 -24 to 2025-26) (Necessary supply orders, performance certificates and 3rd party inspection certificates are to be enclosed). OR b) The tenders Participating as authorized representative/agent(Dealer) of a manufacturer meeting with the above requirements in full will also be considered provided: i) The manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per conditions of contract. ii) The tenderer as authorized representative(Dealer) should have supplied 6000liters & above capacity any installed and commissioned the Combination machines similar to the type, size and Complexity as specified in the schedule of requirement upto at least 3Nos. to any Government Organization(End user) in any one of the last three financial years(2023-24 to 2025-26)(Necessary supply orders, performance certificates and 3rd party inspection certificates are to be enclosed). OR c) i. In case of Micro, Small & Medium Enterprises tenderer should enclose relevant Certificate issued by Competent Authority in the absence of which the tenderers will not be considered for further evaluation. ii. If the tenderer be a Micro & small Enterprises as per G.O must have manufactured, tested and supplied 6000liters & above capacity the Combination machines similar to the type, size and complexity as specified in the schedule of requirement upto at least 4Nos. of Combination machines to any Government organization (End user) in any one of the last two financial year(2024-25 to 2025-26) (Necessary supply orders, Performance Certificates and 3rd party inspection certificates are to be enclosed) d) The Tenderer (Manufacturer/ Dealer) should possess a annual financial turnover of Rs.929.60 lakhs during the last three preceding financial years (2023-24 to 2025-26). Based on G.O for Micro & Small Enterprises should possess a annual financial turnover of Rs.232.40Lakh during the last 2 preceding financial year(2024-25 to 2025-26). e) The Tenderer should demonstrate the availability of Liquid Assets and/or availability of Credit Facility of not less than Rs.139.40 Lakh(Credit

	Line/Letter of Credit/Certificates from Nationalised /Scheduled Bank). f) The tenderers participating in the above tender has a reputed manufacturer or authorized dealer should have the experience of Equipment Maintenance of minimum 5Nos. Combination machines in any one of the last Five financial years (2021-22 to 2025-26). g) Tenderer shall possess an Assessed Available Tender Capacity (AxN-B) not less than 8Nos. suctions cum jetting Machine, Where, A=Licensed capacity for manufacturing of Vehicle. N=Number of years prescribed for completion of supplies for which tenders are invited. i.e., 12 months B= Number of existing commitments to be supplied during the next 1 year. h) The tenderer must have ISO 9001 and 14001 certifications with validity since last one year. Latest audited certification must be submitted. i) Documentary evidence showing authorized service centre with registration of certificate with a Bangalore city limits. j) Trade certificate issued by RTO, Government of Karnataka. The last date & time for receipt of tenders is 10.08.2026 (Documents shall be downloaded from website from 28.07.2026 to 10.08.2026 before 4:00P.M.) The tendering will be in Electronic Mode submitted through KPP-Portal (www.karnataka.PP) as follows: **The Technical Bid shall contain the following:-** **1.TECHNICAL BID:** i) Earnest Money Deposit copy ii) Annexure-A duly filled and signed iii) Details of earlier supplies in format appended vide Annexure–B (Copies of supply order and Performance Certificates from the End User should be enclosed). iv) Turnover Certificate v) Technical Specifications & Drawings of the equipment's offered. vi) Schedule of guarantee table 2.3 vii) Certificate stating that the tenderer is not black listed viii) History of Criminal and Litigation Records. ix) Affidavit about correctness of the details furnished. x) Programme of work including schedule of contractor’s proposal for Maintenance during defect liability period. xi)Calculation sheet to establish the HP available at output shaft of the PTO **2. FINANCIAL BID:** The Financial Bid consists of Schedule B - in which the rates have to be offered shall be only in Electronic Mode and submitted before due time and date.
2.	Tenders received without E.M.D. will be rejected outright. The E.M.D. amount so deposited by the successful tenderer will be refunded only after submission of performance security in the form of irrevocable Bank Guarantee issued by a Nationalized/ Scheduled Bank/, in a sum equivalent to 5% of the contract value of Combination machines as per Clause-17 of the tender. The E.M.D. of the unsuccessful tenderer will be refunded after the award of the work to the successful tenderer. The E.M.D. so remitted by all

	the tenderers will not bear any interest.
3.	The Technical Bids will be opened by the Chief Engineer(IP,R&D) on 11.08.2026at 17.00hrs in the presence of the firms' representatives/authorized agents, who may be present at that time. If, for any reason, the tender cannot be opened on the said date and time, the next date and time of opening will be intimated to the representatives present.
4.	The submission of tender by the tenderer implies that he has read the terms and conditions of contract and made himself aware of the scope and specification 6,000 ltrs., capacity Combination machines to be mounted on suitable BS-VI chassis supplied by Board.
5.	Validity: The tenderer should keep his offer valid at least for a period of 90 days from the date of opening and if necessary for a further period as desired by the Chief Engineer(IP,R&D) BWSSB, 3rd floor Cauvery Bhavan, K.G.Road, Bangalore-560009.
6.	Agreement Clause: a) The enquiry along with the appended schedules shall form part & parcel of the agreement, which is executed after acceptance of the tender. b) Agreement in the prescribed format shall be executed between successful tenderer and the, Chief Engineer (P), Bangalore-560009 within 21 days from the date of communication of approval of his/their tender, failing which the E.M.D. shall stand forfeited.
7.	Rates to be offered: a) The rates should be legibly uploaded in Figures. b) The rate quoted for manufacturing, supply & delivery of 8Nos. of 6,000 Litres capacity Combination machines to be mounted on suitable BS-VI Chassis supplied by Board should be inclusive of all taxes, duties, license fees, Octroi, Road permit, entry tax, transit insurance, transportation, unloading, III Party Inspection charges, mandatory spares, RTO Permanent Registration including comprehensive (KGID) annual insurance charges etc., F.O.R., Central Stores, C.J.F., Malleswaram, Bangalore giving the breakup details. c) In case of any concession, exemption or refund of duty is applicable to the above supplies, which are to be passed on to the purchaser, the supplier shall consider the above in his offer, and specifically mention such benefits in the technical offer. In case of any such levies which are exempted / refundable which are not to be passed on, these details shall be furnished in the technical offer. d) The rates quoted shall remain "Firm" till the supply ordered including additional quantities as specified in the contract. During the contract period the supplier shall not be entitled to any enhancement in the rate on account of rise in the price of any raw materials, electricity tariff, diesel, oil, statutory levies etc., or for any other reason whatsoever. e) In case, additional quantities of 6,000 ltrs., capacity Combination machines mounted on suitable BS-VI chassis over and above the quantities noted in the Schedule-B are required during the period of contract, the Supplier shall be bound to supply the said quantities at the accepted rates. Likewise, the tendered quantity can be curtailed. Usually the additional requirement or curtailment shall be 25% of the tendered quantity. f) The Tenderer shall be entirely responsible for all taxes duties, license fee, Octroi, road permits, entry tax etc, incurred until the delivery Combination machines mounted on suitable BS-VI chassis FOR Central Stores.

8.	Evaluation of Tenders: a) The evaluation of the tender will take into account, in addition to the basic price, excise duty, III Party inspection charges, transportation charges, transit insurance and other costs which are incidental to the delivery of the 6,000 Litres capacity Combination machines to be mounted on suitable BS-VI chassis supplied by Board FOR Central Stores Division, B'lore-9. b) In case, if L1 rates are offered by more than one firm, then the L1 firm will be decided by CE(IP,R&D).
9.	Delays in the supplier's performance: i) The maximum time allowed for completion of supply of 8Nos. of 6,000 litres capacity Combination machines mounted on suitable BS-VI chassis is 12 months from the date of issue of BS-VI chassis by the Board. The tenderer shall make arrangements to take away the chassis at the designated location as informed by the Board to mount the equipment. ii)However, the time schedule shall be indicated at the time of agreement. The Supply schedule should be promptly adhered to. iii)If, at any time, during performance of the contract, the supplier should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its causes. As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may, at its discretion, extend the suppliers time for performance with or without liquidated damages. iv) Except for the delay in an event of Force Majeure (an event beyond the control of the supplier and not involving the supplier's liable to be imposition of liquidated damages, pursuant to Clause-10 unless an extension of time in agreed upon pursuant to Clause 9(iii) without the application of liquidated damages.
10.	Liquidated Damages Clause: Failure on the part of the supplier to make supply as per supply Schedule indicated will be construed as a breach of contract, and the purchaser shall deduct from the contract price, as Liquidated Damages, a sum equivalent to 0.5% of the delivered price of the delayed goods for each week or part thereof of delay until actual delivery, upto a maximum deduction of 10% of contract price. Once a maximum is reached, the purchaser may consider termination of contract.
11.	Termination for Default: 1)The purchaser may without prejudice to any other remedy for breach of contract by a written notice of default sent to the supplier, terminate the contract in whole or part:- (a)If the supplier fails to deliver any or all of the goods within the period specified in the contract or within any extension thereof granted by the purchaser pursuant to Clasue-9. (b)If the supplier fails to perform any obligation under the contract. (c)i)If the supplier in the judgment of the purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the contract ii)In the event purchaser terminates the contract in whole or in part pursuant to Clause-11(i) the purchaser may procure up on such terms and in such manner as it deems appropriate, 6,000 ltrs., capacity Combination machines to be mounted on suitable BS-VI chassis supplied by Board similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar 6,000 ltrs., capacity

	Combination machines to be mounted on suitable BS-VI chassis supplied by Board. However, the tenderer shall continue the performance of the contract to the extent not terminated.
12.	Termination for Convenience: i)The purchaser by written notice sent to the supplier may terminate the contract in whole or in part, at any time, for its convenience. The notice of termination shall specify the termination is for the purchaser convenience, the extent to which performance of the supplier under the contract is terminated and the date upon which such termination becomes effective. ii) The 6,000 ltrs., capacity Combination machines to be mounted on suitable BS-VI chassis supplied by Board that are complete and ready for dispatch within thirty days after the supplier's receipt of notice of termination shall be accepted by the purchaser at the Contract Terms and Prices, for the remaining quantity of 6,000 ltrs., capacity Combination machines to be mounted on suitable BS-VI chassis supplied by Board the purchaser may elect, to have any portion completed and delivered at the Contract Terms and Prices and / orto cancel the reminder and pay to the supplier an agreed amount for partially completed 6,000 ltrs., capacity Combination machines.
13.	Warranty Clause: a) The tenderer should give warranty for 6,000 litres capacity Combination machines covering all components for a period of one year from the date of commission against any manufacturing defects and enclose the Schedule of Guarantee-Table-2.3 duly signed by enclosing the list of components which are covered under the warranty period. b) In case, if the 6,000 Litres Capacity Combination along with its accessories are supplied in damaged condition or found not in conformity to the specification as per Clause-1.20 & Table-2.2, such equipment's/items shall be rejected and the tenderer shall take back such sewer cleaning equipment's/items at their risk and cost and the tenderer should replace such rejected equipment's/items with new one as per specification and drawings within 30 days, without any extra financial implication to the Board. c) The tenderer should comply with the additions or alteration as suggested by the RTO to meet all the requirements as per Central Motor Vehicles Registration Act at the time of registration of the vehicle at their own cost. d) The Tenderer shall make all arrangements for the permanent registration of the vehicle which will be separately procured and supplied by the Board and obtaining of all documents relating to the vehicle in complete manner.
14.	Insurance: 6,000 litres capacity Combination machines to be supplied shall be fully insured in Indian rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery of the same at site, the insurance shall be obtained by the Supplier from FOR works to FOR Central Stores Division, Malleswaram, Bangalore on "All Risks" basis including war risks and strikes and this rate should be included in the offered price.
15.	Inspection & Testing: a) Prior to the dispatch of the 6,000 litres capacity Combination machines from their works, the tenderer should make necessary arrangements to enable the Board Officers to conduct inspection of the same at their works and the cost towards the same should be borne by the tenderer.

	b) 6,000 litres capacity Combination machines mounted on suitable BS-VI chassis will be inspected by a III Party inspection Agency appointed by the Board and the cost towards the same should be borne by the tenderer.
16.	Mode Of Payment: A. Supply of combination machines: a) 100% payment of the total contract value shall be made within 60 days after receipt of 6,000 litres capacity combination machines at Central Stores, CJF, Malleshwaram, Bangalore, in complete manner along with III Party inspection certificate, mandatory spares required for maintenance of the equipment's for two years, one year comprehensive (KGID) insurance and permanent registration by RTO. b) Any sum of money due and payable to the tenderer under this Contract may be appropriated by the Purchaser by setting off against any claims of the Purchaser for the payment of sum of money arising out or under any other contract made by the tenderer with the Purchaser. c) No alterations/modifications in the mode of payment is acceptable. d) No Mobilization Advance shall be paid. e) No Advance payment shall be made by the Board either to purchase any auxiliary units or the equipment. f) All payments will be made in Indian Rupees only. B. Out of total quoted amount the O & M cost along with terms and conditions will be intimated at the time of agreement.
17.	Performance Security: Within 21 days of the receipt of Letter of Acceptance from the Purchaser, the tenderer shall furnish a performance security in the form of irrevocable Bank Guarantee from a Nationalised /Scheduled Bank in a sum equivalent to 5% of the contract value of 10 Nos. of 6,000 litres capacity combination machines. If not, the EMD deposited by the tenderer shall be forfeited. The performance security shall be valid up to 60 days after the date of completion of performance obligation as per Clause-13 of GTC and the purchaser shall refund the same after the satisfactory completion of the supplies, in a complete manner. The Security Deposit shall not bear any interest.
18.	Training: The Supplier shall arrange at his own cost to train Board's Drivers for operating and maintaining the Unit. The training period shall be one week.
19.	Legal Clause: a) Conditional Offers are rejected outright. b) The Chief Engineer(IP,R&D), reserves the right to accept or reject any or all tenders without assigning any reasons whatsoever. Even if the tenderer meets all the eligibility and qualification criteria his tender shall be summarily rejected if he is found to have misled or made false representation in the form of any of the statements submitted in proofs of the eligibility and qualification requirement or if he has a record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, financial failures, etc., c) In the event of any disputes arising out of this contract, the decision of the Chief Engineer (IP,R&D) is final and binding on both the parties. d) The contract shall in all respects be construed and operative as per Indian Contract Act, Sale of Goods Act-1930 and in conformity with Indian Law and is subject to the jurisdiction of Bangalore City Civil Courts only.

	e) The Tenderer should not have been ever black listed by any Organization in any State. Further, if any Organization had initiated any such action against the Tenderer and reconsidered the same subsequently, the grounds on which the Organizations took a lenient view may be furnished with documents. f) The procurement of 6,000 litres capacity combination machines is not covered under Arbitration Clause. g) History of Criminal and Litigation Record: If any criminal cases are pending against him/her/partners at the time of submitting the tender, the tender will be summarily rejected. In this regard, the tenderer shall submit an affidavit to the affect that the details furnished with respect to history of criminal and litigation cases pending against him/her/partners is true.
22.	The supplier shall handover the equipment along with all accessories in good condition to the Board, failing which proportion sum of money shall be deducted from the Performance Security.
23.	The tenderers should invariably fill in the Annexure- 'A' & 'B' and Table 2.2 & 2.3 appended to the Technical Bid and enclose the requisite documents without fail, duly affixing their Seal and Signature if not the offer of the tenderer will not be considered for further evaluation.

Sd/-

Signature of the Tenderer **Chief Engineer(IP,R&D)**

BWSSB

SPECIFICATION

1.1 DESIGN

Offered equipment shall be made of components of proven design. The supplier shall design the equipment to the purchaser's satisfaction and in accordance with the requirement detailed below. The design shall be in accordance with the best modern practice and shall facilitate inspection, cleaning and lubrication and repair to ensure satisfactory operation under all service conditions. The equipment or any part thereof may be of the supplier's standard design provided that such design is generally in accordance with the specification. The suppliers design calculations, if called for, shall be submitted to the purchaser.

Approval by the purchaser of the supplier's design or drawings shall not relieve the supplier of any of his obligations or liabilities under this contract.

1.2 TENDER DRAWINGS

Drawings submitted by the supplier shall show all the essential items of the equipment offered together with sufficient details.

1.3 DRAWINGS GENERAL

All drawings provided by the supplier shall be of size A1 with in a border of 810mm x 560 mm in the form of black lines on a white background and shall show the following particulars in addition to the suppliers name, date, scale, number and title.

1.4 PREMILINARY DRAWNGS

The supplier shall submit to the purchaser 6 prints of drawings showing the layout and dimensions of the equipment, details of loads to be carried and all other necessary details.

1.5 DETAILED DRAWINGS

The supplier shall submit to the purchaser 6 prints of all working drawings and such general and detailed drawings as the purchaser may require from time to time. These shall include details of equipment, pipe

work etc. These drawings (together with any of the said preliminary drawings, which may be necessary) having been corrected or amended as necessary to the purchaser's approval shall become the approved drawings to be used for manufacturing of the equipment. Any other drawings as required by the purchaser shall be submitted by the supplier. Unless specific instructions are given by the purchaser in writing, no drawings other than approved drawings shall be used for manufacture of the equipment.

1.6 RECORD DRAWINGS:

Record Drawings shall show the whole of the equipment as assembled. Further these shall show all major sub-assembles.

1.7 INSTRUCTUION MANUALS:

The supplier shall provide five bound sets of approved instruction manuals. All descriptive leaflets, instruction sheets, charts, lists, pamphlets and other documents that are used in compiling each manual shall be contained in one more binders designed to prevent loss of contents. Each binding shall be titled with the name of the purchaser, the name of the equipment's, the contract name, the name of the supplier and with information to identify the matter and shall include a detailed index to all literature contained therein.

The instruction manuals shall be approved in draft from initially by the purchaser. The instruction manuals shall comprise both operating instructions and maintenance instructions.

A separate section of the manual shall be devoted to the Combination machines. It shall contain a detailed description of its construction and operation and shall include all relevant pamphlets and lists of parts with procedure for ordering spares. The detailed sections of the manual, if necessary, shall contain further maintenance instructions and fault location and diagnosis charts.

The manual shall be printed on A4 size sheets and bound in two lock binders. Reduced size of Record Drawings shall be included in the manuals.

a) Step by step directions on setting the equipment to work listing all adjustments and settings necessary for the correct functioning of the equipment.

b) Instructions of monitoring of equipment performance and sample log sheet for each item of equipment, to be completed by operators on a routine basis.

c) “Do’s and Don’t’s in the equipment operations, operators attention shall be drawn to all operations considered to be dangerous to operators or likely to cause damage to the equipment.

The maintenance instructions shall be the following:

1. Checking, testing and replacement procedures to be carried out of all mechanical and electrical items on a daily, weekly and monthly basis or at longer intervals to ensure trouble free operation.
2. Fault locations and remedy charts to facilitate the cause of malfunctions or breakdown and correcting fault.
3. Complete list recommended lubrication charts.

d) A “spares schedule” which shall consist of a complete list of itemized spares for all equipment with ordering references and part numbers.

e) Full instruction to cover the complete dismantling and reassembly of all items of the equipment supplied.

1.8 PROGRAMME DETAILS

Within four weeks of the acceptances of its (except for letter of acceptance) the supplier shall submit to the purchaser for his approval six copies of a detailed programme in the form of a bar chart showing all the activities of manufacture, supply and delivery of the equipment.

Details to be shown in the programme shall include such items as preparation and submission of drawing, placing of work orders (supplier’s own and sub supplier’s) tests at place of manufacture, deliveries to site. The programme shall be updated from time to time throughout the

contract period as required by the purchaser, on the basis of revisions by the purchaser following discussion with the supplier.

1.9 PROGRESS REPORT

The supplier shall submit drawings in the first week of each month with progress report in such form that actual progress to the end of the preceding month may be compared with the supplier's program.

1.10 GUARANTEE

The supplier's guarantee both in respect of performance, output and efficiency shall be binding under the contract. The fulfillment of these guarantees will be verified during the Tests on supplier's premises in India.

1.11 SPARE PARTS

The supplier shall offer spare parts (Mandatory Spares) required for normal operation of the equipment as per Table 2.1.1 and the total cost of these items shall be forwarded to schedule of price as per Table 2.1

1.12 TOOLS

A complete set of necessary standard and special tools shall be supplied by the supplier free of cost to enable assembly or dismantling to be carried out on any part of the equipment whether of an electrical, mechanical, or other nature, during the life of the equipment. The tools supplied shall include clamps, wrenches, lifting lugs, grease gun and any other special tools, which may be required during the life of the equipment.

1.13 PROTECTION AND PACKING

Before any equipment is dispatched from manufacturer's work it shall be properly prepared and packed and the supplier shall bring this to the notice of the purchaser at least fourteen days in advance prior to the commencement of the packing.

Prior to dispatch, all equipment's shall be adequately protected by painting or by other approved means for the whole period of transit, storage against corrosion, incidental damage, including the effect of

vermin, sunlight, rain, high temperatures and humid atmosphere. The suppliers shall be responsible for the equipment being so packed and / or protected so as to ensure that it reaches the site intact and undamaged. The equipment shall be packed to withstand rough handling in transit and all packages shall be suitable for storage including possible delay transit. The supplier shall be deemed to have included in the Price Schedule for all materials and packing cases necessary for the safe package, conveyance and delivery of the equipment.

The flanges of pipes, valves, and fittings shall be protected by wooden discs attached by means of service bolts (which shall not be used at site) or by other approved means, the sleeves, flange of flexible coupling shall be bundled by wire. Cases containing rubber rings, bolts and other small items shall not normally weight more than 50 Kg. Gross per case.

` All spare parts shall be packed for marine transport on long storage under the climatic conditions prevailing at the site. Each spare part shall be clearly marked or labelled on the outside of its packing with its description, number and purpose and when more than one spare is packed in a case or other container, a general description of its contents shall be shown on the outside of such case or container and a detailed list shall be enclosed. All cases, containers and other packages shall be marked and numbered in an approved manner for the purpose of identification.

All cases, containers or other packages are liable to be opened for such examination as the purchaser may require and packing shall be designed to facilitate opening and repacking thereafter.

All items shall be clearly marked for identification against the packing list, every crate or package shall contain a packing list on a waterproof envelope. A duplicate copy of the packing list shall be sent by post to the purchaser at site.

All crates, packages, etc. shall be clearly marked with a waterproof material to show the weight and where the slings should be attached and

shall also have an indelible identification mark relating them to the packing lists.

1.14 FLANGES

All flanges used in the pipe work shall be of IS Standards. Non-standard flanges will not be acceptable.

1.15 MATERIAL-GENERAL

All materials in the works shall be the most suitable for the duty concerned and shall be new and of first class commercial quality, free from imperfection and selected for long life and minimum maintenance.

1.16 WORKMANSHIP - GENERAL

All similar items of the equipment and their component shall be completely interchangeable. Spare parts shall be manufactured from the same materials as the originals and shall fit all similar items. Machining fits on renewable parts shall be accurate so that replacement made to manufacturer's drawings may be readily installed. All equipment shall operate without excessive vibration and with minimum noise. All revolving parts shall be truly balanced both statically and dynamically.

1.17 TESTS AT MANUFACTURER'S PREMISES.

Tests on equipment at manufacture's premises shall be carried out as per applicable standard codes and specifications. All inspection, examination and testing shall be carried out in presence of purchaser. All instruments used for such tests shall be calibrated and certified by an approved independent testing authority not more than three months prior to the test in which they are used. The purchaser reserves the right to reject any instrument for lack of independent testing. A certificate shall be produced by the supplier at the time of carrying out every test showing the reading obtained, all calculations and full details of the calibration certification referred to. If the purchaser witnesses a test he shall be given a copy of test results & certificates immediately. Whether he witnesses a test or not, copies of test certificates shall be sent to the purchaser. No item required to be tested shall be forwarded to the site until its test certificate has been

approved in writing by the purchaser. Six copies of the works test/inspection shall be supplied.

1.18 INSPECTION

After assembly at the manufacturer's works and after ensuring that all equipments are in good working order, the supplier shall inform the purchaser who will carry out inspection at the firm's cost. The equipment will also be inspected by a third party authorized by the purchaser and the cost towards the same should be borne by the supplier.

If the workmanship is found defective in performance and not as per specified conditions, the supplier shall take immediate steps to remedy the deficiency to the satisfaction of the purchaser.

1.19. GENERAL

The supplier should furnish the catalogue of those components of the equipment as specified in Table 2.2 which are included in their tender.

The vehicle mounted combined unit for jetting/suction shall be able to create vacuum required for siphoning of mud, slurry, grit and other materials from sanitary, storm and combined sewerage system and high velocity jetting to remove and dislodge, obstruction, soluble grease, grit and other materials from sanitary storm and combined sewerage system. The unit shall be especially being required to clean out the non-man entry drain and deep wet wells of sewage pumping stations.

1.20. TECHNICAL SPECIFICATIONS FOR COMBINATION MACHINE.

1.20.1 The vehicle mounted combined unit having suction lift of at least 9 Mtrs and the unit shall consist of

1. Drive System
2. Tank
3. High pressure jetting pump
4. Vacuum pump (Exhauster/Compressor)
5. Suction Hose
6. Hose Reel Drum
7. Sewer Hose
8. Lateral cleaning system (including handgun arrangement)
9. Hydraulic Plant

10. Piping
11. Control panel
12. Accessories
13. BS-VI Vehicle Chassis

1.20.2 The above equipment shall be mounted on BS VI chassis supplied by Board. The Tenderer shall make arrangements for mounting the equipment on the chassis according to the rules laid down by the Regional Transport Office, and loads recommended by the chassis manufacturer on the front and rear axles. The Bidder shall make arrangement for Permanent registration of the complete unit with the Regional Transport Office including Comprehensive insurance. But no incidental charges will be paid.

1.20.3 PRIME MOVER

The jetting pump, vacuum pump, hydraulic pump etc., shall be run by the power transmitted from vehicle engine split shaft P.T.O (Power Take Off Unit). The P.T.O shall be of sturdy design of and should be able to provided sufficient power to run the system. H.P. available at output shaft of P.T.O at 1800 rpm. should be indicated duly substantiating the same with calculation.

P.T.O SPECIFICATION: ((Power Take Off Unit)

` The P.T.O. Unit shall be split shaft horizontal type, fitted with Nickel Chrome Alloy Steel Gears on Heavy Duty Ball and Rolled bearings accurately machined housing.

The unit shall be designed for horizontal drive. The RPM and directions of rotation of output shaft shall be the same as that of the input shaft. Foot mounting arrangement shall be provided for mounting the P.T.O unit.

Shift mechanism with (a) Vehicle Drive (b) natural and (c) pump drive shall be provided so that the same can be operated from inside the cab. The unit shall be completed with top cover with breather, magnetic drain plug and sight glass or dip stick for oil lever indicator. The P.T.O Unit shall be capable of transmitting adequate torque generated by the engine.

1.20.4 TANK

The combined twin compartment tank shall have a capacity of at least 6000 litres total (4000 litres for water and 2000 litres for sewage). The tank shall be mounted on the chassis supplied by Board. The tank shall be fabricated from mild steel conforming to IS:2062 and having a minimum thickness of 6 mm and it shall have provision to take care of any surges that might occur in the tank. Both exterior and interior of the tank will be sand blasted prior to spray painting. The tank exterior shall be spray-painted with two coats of superior quality anti-corrosive primer and two coats of epoxy paint of reputed make. The color shade will be that of the customer's choice. To resist corrosion due to weak acids, the tank interior will be coated with two coats of anti-corrosive primer and three coats of epoxy paint of superior quality.

The tank shall be welded with dished ends at the front and the rear. The vacuum compartment shall be provided with hydraulically operated rear door opening facility. The tank shall be mounted on hinge supports for titling about the rear end, while the front end shall have rest pads for seating on the chassis of the vehicle in the horizontal position.

The water and sludge tanks shall be provided with sight glasses so that the levels of water and sludge in the respective tanks may be seen. Both the tanks shall be fitted with proper fittings and valves like hydrant, hose connection for water tank filling, drain valves, jetting pump, suction-shut off etc.

The tank shall be provided with manhole at the water compartment for attending to the maintenance operators/ repainting of the tank. The tank shall be provided with suitable suction line strainer and filler hose connection.

The entire tank shall be fabricated and finished to the best of quality standards and as per the standard engineering practice.

1.20.5 HIGH PRESSURE JETTING PUMP

The high pressure-jetting pump shall be a fully variable unit with a heavy duty, positive displacement type, Triplex-plunger pump made of

forged alloy steel crank shaft, nickel treated cast iron piston guide, ceramic plunger., reciprocating plunge and having a discharge capacity of 226 LPM. at 140 bar pressure to perform the jetting function with a high degree of efficiency and reliability.

The pump shall be with proven performance, and shall be suitably located on the chassis with provision for stopping the jetting pump without stopping the prime mover.

The pump shall be equipped with pressure relief valve of for protection and life extension of jetting pump.

1.20.6 VACUUM PUMP

A rotary positive type air cooled rotary positive type vacuum pump with maximum operating pressure of not less than 1.5bar having displacement capacity not less than 5300 LPM at free air and 4500 LPM at 60% vacuum along with spring loaded safety valve comprising of pressure relief valve & suction relief valve. Basically, the vacuum pump shall be designed to create vacuum, as well as air compressor for blow back during discharge. The vacuum shall be capable of producing 92% vacuum in the tank and designed for 30minutes continuous operation. The pump shall be driven through Power Take Off Unit.

The vane blades for the vacuum pump shall be of heat resistant material. The vacuum pump shall be designed for continuous running without interruption, Manufacturers certificate to this effect must be enclosed with the offer.

The vacuum pump shall be suitably located on the chassis with provision for stopping the vacuum pump without stopping the prime mover.

A hand operated manifold valve for switching from suction to pressure shall be provided at the discharge of the vacuum pump and the valve shall be suitably located for ease of operation. Corrosion resistant ball float valve shall be provided to prevent over-sucking. A safety pot with lateral cleaning flap and outlet valve with additional suction filter shall be

provided. The Vacuum pump shall be equipped with overpressure relief valve for protection, cooling and life extension of vacuum pump.

1.20.7 SUCTION HOSE

15Rmt. of non-collapsible, flexible PVC suction hoses of 100mm internal dia, in multiples of 3 mtrs. per length shall be provided with the unit. Quick-fix design coupling (male-female) shall be provided for these hoses. One end of the suction hose of 75 mm internal dia and 2 mtrs long with 1 mtr. Long steel pipe at one end and quick fix coupling (female part) at the other end, shall be provided with each unit.

1.20.8 HOSE REEL DRUM

The hose reel drum shall be sturdy design and shall be designed to take a minimum of 90 mtrs. of 19 mm internal diameter high pressure jetting hose.

The hose reel drum shall be driven through a hydraulic motor to effect the wind and unwind operations.

The hydraulic motor shall be designed for withdrawing the hose at its full length inside the sewer lines against the friction and jetting reaction forces. A manual cranking facility shall be provided.

The high-pressure water supply to the jetting hose shall be given through a special rotary swivel arrangement provided at the hose reel drum end.

1.20.9 SEWER HOSE

Subject hose shall be of material as detailed in Table-2.2 and designed in such a manner so as to facilitate replacement on a powered hose reel without interfering with the original manufacturers intended minimum bend radius.

Subject hose will have a bend radius not more than 90mm and shall be constructed of material as detailed in Table-2.2 suitable for the sewer cleaning application and should satisfy the following pressure ratings:

a) Burst pressure shall not be less than 625bar

b) Working pressure shall not be less than 250bar

1.20.10 LATERAL CLEANING SYSTEM:

The lateral cleaning hand gun, complete with 10 mtrs. long, 12.5 mm dia hose and quick coupling connector shall be provided. The washing down shall be facilitated by two conveniently located connection points. The water shall be made available from the water pump at a reduced pressure to ensure operator's safety.

This will be used for:

i. Cleaning the side gully's of the road
ii. Cleaning the manhole areas inside and outside.
iii. Servicing the chassis vehicle and unit. Besides, this other has various uses.
iv. Fire fighting, general purpose cleaning and maintenance.
v. Street cleaning maintenance.

This system will not only enhance the machine's capacity but also increase the efficiency of sewer cleaning process.

1.20.11 HYDRAULIC PLANT.

The Hydraulic pump shall be capable of developing a pressure of about 140-150 bar approx. powered by P.T.O. The entire hydraulic plant will consist of oil reservoir. Pipeline with connected hoses, filter, control valve for operation of hydraulic function, etc. It shall be suitably laid by along the entire length of the tank and cabin thereby avoiding space for the plant.

1.20.12 PIPING

All piping subject to high pressure shall be fabricated from extra strong pipes and all fittings shall be forged steel. All piping shall be laid out such they can drain by giving or through suitable openings to drain water, when purged with air.

1.20.13 CONTROL PANEL:

A control panel shall be provided and located continently. All gauges, switches, acceleration lever, jetting/bypass valve lever, control panel pump, Industrial Socket for flasher lamp. (including appropriate wiring) Low water alarm with indicator necessary for the operation of the unit

shall be grouped in this control panel so that the operator can have complete of the operation.

1.20.14 ACCESSORIES

The following accessories shall be supplied along with each unit and included as part of item No. 2 - Equipment in Price Schedule.

i. Set of Nozzles
   a) 15° radial nozzle (5 rear jets 1 forwarded)
   b) 35° radial nozzle (5 rear jets 1 forwarded)
   c) 45° tangential nozzle (6 rear jets)
   d) 35° penetrator nozzle (5 rear jets 1 forwarded)

ii. All chequered plate special maintenance platform with railing between cabin and tank –1 No.

iii. All chequered plate catwalk with ladder –1 No.

iv. All chequered plate lockable tool box-1No.

v. Floats switch with indicator and hooter for low water level-1 No.

vi. Rotating beacon with cabling –1 No.

vii. Flash lamp-1 No.

viii. Reserve audiovisual horn-1 No.

ix. Mud guards – 2 Nos.

x. Mud flaps –4 Nos.

xi. Visual indicating light for PTO –1 No.

xii. Filler hose- 10 mtrs.

1.20.15 VEHICLE CHASSIS:

The complete equipment shall be mounted on suitable BS VI chassis to be supplied by the Board. The tank should be mounted on minimum 3mm chequered plate with safety railing of minimum height 18” height with provision of tool box of size not less than 42” length and complete manifold should be cover with MS sheet with painting.

1.20.16 PAINTING

The entire unit shall be painted with two coats of superior quality anti-corrosive primer along with grey/ steel putty and with two coats of approved quality Epoxy paint. The bidder shall get the color and shades approved from the Engineer.

1.20.17 TRAINING

The successful bidder shall arrange at his own cost to train 2 Nos. of Purchaser's operators for operating and maintaining each unit. The training period shall be 1 week.

1.20.18 MAINTENANCE DURATION:1 year Warranty and 5 years of Equipment maintenance period.

a. The successful Tenderer owning a authorized service centre in Bangalore should take up repairs and replacements to the sewer cleaning equipment's supplied during the warranty period of 1 year + 5 year Equipment maintenance with in 24 hours from the receipt of machine for maintenance.

b. The Equipment maintenance includes complete equipment portion such as jetting pump, suction pump, split shaft PTO, hydraulic motors, High pressure valves, relief valve, hydraulic cylinders, fabrication, tank, hose reel, sewer cleaning nozzle, gate valves, door locking. The Equipment maintenance does not include chassis, rubber items, wear & tear items, hose and consumables.

C. The successful bidder needs to maintain the vehicles during the maintenance period. The complaints received from the concerned BWSSB Maintenance Engineer need to be resolved in 24 hours, failing which monthly penalty of Rs. 10,000/- will be recovered.

d. During warranty period any equipment performance shall be as per Motor Act and if any defect arises, the same has to be replaced by the tenderer at his cost & risk.

e. A supervisor should inspect the vehicles for fortnightly in presences of Department Engineer to identify the performance of vehicles and same has to be submitted to Department Maintenance Engineer and EE (Central Store).

f. The O & M bills will be paid once in quarterly against the submission the above document and relevant documents.

1.30: Special conditions of contract: For MSME registered in Karnataka: 15% price preference will be provided to MSME registered bidders as per MSME ‘s Government order No: FD 908 EXP-12/2019 Bangalore Dated: 21.7.2020, No: FD 537 EXP-12/2021 dated: 25th July, 2022, under KTPP Rule.

Sd/-

Signature of the Tenderer **Chief Engineer(IP,R&D)**

BWSSB

ANNEXURE-B

Performa for Performance Statement for the year……during which Combination machines mounted on suitable BS-VI chassis are supplied.

Ref:Tender No.BWSSB//**CE(IP,R&D)/ACE(Cstr&DCW)/ /2026-27** Dt:

Date of Opening:

Time-…….12.00hrs

Name of the Firm……

Orders placed by(Full address of Purchaser- End User)	Order No. and Date	Quantity of Combination machines ordered	Qty. of Combination machines supplied	Performance Certificate issued by the Purchaser to the extent of supplies made (attach a certificate from the Purchaser)
1	2	3	4	5

Note :-

i. Specific year during which the stipulated supplies were made should only be indicated.

ii. Respective supplies indicated in the above perform should invariably be substantiated with relevant documents such as Supply Orders and respective Performance certificates issued by the End User or Third Party inspection certificates of relevant orders, without which the tender will not be considered for further evaluation.

Sd/-

Signature of the Tenderer **Chief Engineer(Project)**

BWSSB

TABLE-2.2 - TECHNICAL SHEDULE

Sl. No.	Description	As required by tender
I	DRIVE TO JETTING PUMP, VACUM PUMP AND HYDRAULIC PUMP	
	A) From vehicle Engine through PTO	The Split shaft PTO shall have a compact design made of aluminum casing. Should have minimum three outputs possible- TWO to front and ONE to rear.
	i) Name of the Manufacturer of PTO	PZB/equivalent
	ii) HP available at output shaft of PTO at rpm	120HP@1000RPM
	iii) Torque of Main PTO	Not less than 400Kgm
	iv) Model of PTO	To be mentioned by tenderer
	v) Weight of PTO	Minimum 9.1 kg
	vi) Arrangement to drive Hydraulic pump	Direct Drive from the vehicle's side PTO
II	JETTING PUMP	
	i) Name of Manufacturer	Pratissolli, M/s. Udor spa or Equivalent
	ii) Model	Pratissolli M/s. Udor spa or Equivalent model with technical brochures to be enclosed.
	iii) Type	Shall be Positive displacement type, Triplex-plunger pump made of forged alloy steel crank shaft, nickel treated cast iron piston guide, ceramic plunger.
	iv) Max. discharge capacity	Not less than 226 LPM at 1000 RPM
	v) Max. pressure	Not less than 140Bar
	vi) Weight of Jetting Pump	Not more than 70Kg
	vi) With pressure relief valve	Yes
	vii) Make of pressure relief valve	Pratissolli, M/s. Udor spa, Darling masco or Equivalent
III	VACUUM PUMP	
	i) Name of the manufacturer	Jurop Italy, Battiono pagani or equivalent make

	ii) Model & Type	Rotary vane sliding type
	iii) Max. operating pressure	Not less than 1.5 Bar
	iv) Displacement	
	a) Free air	Not less than 9200LPM
	b) 60% Vacuum	Max 90%vaccum flow rate
	v) Safety valve type	Spring loaded
	vi) Make and model of safety valve	Jurop Italy, Battiono pagani or equivalent make
	a) Pressure Relief Valve	Jurop Italy, Battiono pagani or equivalent make
	b) Suction Relief Valve	Jurop Italy, Battiono pagani or equivalent make
	vii) Maximum vacuum	92%
	viii) Continuous running capacity (load condition)	Maximum, 20 minutes of continuous operation
	ix) Cooling System	Air Cooling System
	x) Vane Blade Material	Heat resistant made of Bakelite
IV	WATER TANK	
	i) Dia	To be mentioned by the tenderer
	ii) Length	To be mentioned by the tenderer
	iii) Capacity	4000litres
	iv) Material of construction	IS: 2062 mild steel – 6mm thick, with epoxy coating inside
V	SLUDGE TANK	
	i) Dia	To be mentioned by the tenderer
	ii) Length	To be mentioned by the tenderer
	iii) Capacity	2000litres
	iv) Material of construction	IS:2062 Mild Steel -6mm thick with epoxy coating inside
VI	HYDRAULIC PUMP	
	i) Name of manufacturer	Dowty/reputed make
	ii) Pressure developed by the system	Minimum 140-150 bar
	iii) Fluid used	Hydraulic oil 68 grade
VII	HYDRAULIC MOTORS	Parker or equivalent
VIII	HOSE REEL DRUM	Tilting Hose reel drum max 90degree

	i) Dimension	To be mentioned by the tenderer
	ii) Material construction	Mild Steel
	iii) Intake Capacity	Minimum 90mtrs
IX	HIGH PRESSURE HOSE	
	i) Name of manufacturer	Zec/Parker/Transferoil/ Treleborg or equivalent
	ii) Outer Tube	Thermoplastic polyurethane base
	iii) Reinforcement	Aramide textile, braided
	iv) Inner Tube	Thermoplastic elastomer base
	v) Internal diameter	19mm
	vi) Working pressure	Not less than 210bar
	vii) Burst pressure	Not less than 525bar
	viii) Bend radius	Not more than 60mm
X	SUCTION HOSE	
	Name of the Manufacturer	To be mentioned by tenderer
	a) Internal dia	100 mm (5Nos of 3mtr length with inter connection)
XI	SEWER CLEANING NOZZLE	
	Name of manufacturer	To be mentioned by tenderer
	Number of Nozzels for Flushing sewer lines (Round head)	01
	Number of Nozzels for removing Blockages (Conical head)	01
	Number of balanced Nozzels for dry silt along with route cutter nozzles	01
XII	Sludge Tank Door locking system	To be provided(Hydraulic)
XIII	Washing system with Handheld Gun	10Mtrs Hose and Hose Reel to be provided

Sd/-

Signature of Tenderer **Chief Engineer(IP,R&D)**

BWSSB

TABLE – 2.3

SCHEDULE OF GUARANTEE

The Tenderer shall give guaranteed particulars as against the requirement as stated in their offer for 6,000-ltrs. Capacity Combination Machines

Sl. No.	As Required	As Offered (Guaranteed Particulars)
	Jetting Unit	
01.	Max. Discharge Capacity - 226LPM	
02.	Max. Pressure - 140 bar	
03.	Sewer Jetting Hose 1.Working pressure – Max3000PSI 2.Burst pressure Max7500PSI	
	Suction Unit	
01.	Displacement Capacity – 9000LPM of free air	
02	Vacuum Created 68.4cms of Hg	
03.	Air cooled system	
04.	20 minutes continuous running capacity (load condition).	
05.	Vane blade material – Heat Resistant	

Sd/-

Signature of Tenderer **Chief Engineer(Project)**

BWSSB

SCHEDULE-B

TABLE-2.1

PRICE SCHEDULE FOR SUPPLY OF 6000 LITRES CAPACITY COMBINATION MACHINES TO BE MOUNTED ON SUITABLE BS-VI CHASSIS SUPPLIED BY BOARD

Schedule No.	Item Description	Unit	Qty	Rate/Unit (In Rs.)	Amount (In Rs.)
1	2	3	4	5	6
1.	Suction-Cum-Jetting Machines to be mounted on BS-VI chassis (supplied by the Board) as per technical specification Clauses No.1.20 including all Sub-Clauses including permanent registration of the vehicle including O & M. The quoted rate should be inclusive of Spare parts listed in Schedule of Mandatory Spares Table-2.1.1	Nos.	8		
	Total				

Note: -

a) Rate quoted should be per 6,000 Liters capacity Combination Machine to be mounted on suitable BS-VI chassis supplied by Board inclusive of all taxes, duties, License fees, Octroi, Road permit, Entry Tax, III party inspection charges, transit Insurance, Transportation, Permanent R.T.O. Registration, comprehensive insurance for one year, FOR Central Stores, Malleswaram, Bangalore.

b) The total amount arrived in Column-6 of Table-2.1 is considered as the final tendered offer.

Sd/-

Signature of the Tenderer

Chief Engineer(IP,R&D)

BWSSB

TABLE-2.1.1

SCHEDULE OF MANDATORY SPARE PARTS REQUIRED FOR MAINTENANCE OF 6 ,000LITRES CAPACITY COMBINATION MACHINES

The total cost (Column wise) of the entire lot consisting of recommended mandatory spares required for the maintenance of 8Nos. of 6,000 liters capacity Combination machines shall be carried forward to Schedule of Price (Table2.1 of Schedule-B.)

Schedule No.	Item Description	Unit	Qty	Rate/Unit (In Rs.)	Amount (In Rs.)
1	**2**	**3**	**4**	**7**	**8**
1.	Hydraulic Oil Breather	Nos.	2x8=16		
2.	Filter	Nos.	2x8=16		
3.	Waterline fitting set	Nos.	1x8=8		
4.	Pedestal bearing for hose reel	Nos.	2x8=16		
5.	Chain for hose reel drum	Nos.	1x8=8		
6.	High pressure seal	Nos.	2x8=16		
7.	Non-return valve	Set	1Set of 8 pieces		
8.	Rubber Seal for main door sealing	Nos.	1x8=8		
9.	Drain valve	Nos.	1x8=8		
	TOTAL				

Note: -

a) Price should be inclusive of all taxes, permanent RTO Registration duties, License fees, Octroi, Road permit, Entry Tax, III party inspection charges, Packing, transit Insurance, Transportation, FOR Central Stores, Malleswaram, Bangalore.

Sd/-

Signature of the Tenderer **Chief Engineer(IP,R&D)**

BWSSB

MANUFACTURER'S AUTHORIZATION FORM

No…….. Dated:…….

To,

_____

_____

_____

Dear Sir,

Tender No. NIT BWSSB/CE(IP,R&D)/ACE(Cstr&DCW)/ /2026-27 Dt:

We _____who are established and reputable manufacturers of Sewer cleaning machines having factories at _____ (address of factory) do hereby authorize M/s_____ (Name and address of Agent) to submit a tender and sign the contract with you for the goods manufactured by us against the above Tender No. NIT No.BWSSB/CE(IP,R&D)/ACE(Cstr&DCW)/ /2026-27 Dt: .

No company or firm or individual other than M/s_____ are authorized to tender and conclude the contract for the above goods manufactured by us, against Tender NIT No. BWSSB/CE(IP,R&D)/ACE(Cstr&DCW)/ /2026-27Dt: .

We hereby extend our full guarantee and warranty as per Clause 13 of the General Terms and Conditions of Contract for supply of 8Nos. of Combination machines (Suction-cum-Jetting machines) of 6,000 Litres capacity (to carry 4,000 ltrs., of water and 2,000 ltrs., of sewage) to be mounted on suitable BS-VI chassis provided by Board for a period of One Year from by M/s _____ against Tender NIT No. BWSSB/CE(IP ,R&D)/ACE(Cstr&DCW)/ /2026-27Dt: .

Your's faithfully,

(Name of the Manufacturer)

Note : This letter of authority should be on the letter head of the manufacturer and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. It should be included by the Tenderer in its tender.

Sd/-

Chief Engineer(IP, R&D)

BWSSB

FORMAT OF BANKER'S CERTIFICATE /LINE OF CREDIT LETTER [TO BE ISSUED IN THE LETTER HEAD OF THE BANK BRANCH]

Reference Number (Sl No.) Place
Date
To
(Name & Address of the beneficiary)

This is to certify that Mr./ M/s. ..... [name of the customer] having is /their registered/administrative office at.....is a customer of our bank and are engaged in.....(nature of activity). If the .....customer is allotted/awarded with .....(brief details of works], we may extend credit facilities upto Rs..... lakh, to meet his /their working capital requirement towards the execution of the said work order as per Loan policy of the Bank.

This credit is valid upto three months from the date of issue, that is upto dd/mm/yyyy.

Sd/-
Name of the Bank, Branch Manger
Address:.....

BANGALORE WATER SUPPLY AND SEWERAGE BOARD

No. BWSSB/CE(IP,R&D)/ACE(Cstr&DCW)/859 /2026-27 Dt 24.07.2026 Office of the Chief Engineer (IP,R&D),

Cauvery Bhavan, Bangalore-560009

TENDER THROUGH KPP- PORTAL ONLY

(https://KPP-portal)

The Chief Engineer(Project), Bangalore Water Supply & Sewerage Board, Bangalore-560 009 invites tenders through KPP- Portal from reputed Manufacturers/Authorized Dealers of Sewer cleaning machines for procurement of 8Nos. of Combination machines (Suction-cum-Jetting machines) of 6,000 Liters capacity (to carry 4,000 ltrs., of water and 2,000 ltrs., of sewage) to be mounted on suitable BS-VI chassis provided by Board. Only such Manufacturers/Authorized Dealers of Sewer cleaning machines who meet the below mentioned eligibility criteria may submit their offer:

1) a)The tenderer should be a Manufacturer who must have manufactured, tested and supplied 6000 ltr and above capacity Combination Machines similar to the types, size and Complexity as specified in the schedule of requirement upto at least 6Nos. to any Government Organization (End user) in any one of the last three years (2023-24 to 2025-26) (Necessary supply orders, performance certificates and 3rd party inspection certificates are to be enclosed).

OR

b) The tenders of tenderers quoting as Authorized Representative/Agent of a manufacturer meeting with the above requirements in full will also be considered provided:

i) The manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per conditions of contract.

ii) The tenderer as authorized representative (Dealer) should have satisfactorily supplied 6000 ltr and above capacity Combination machines similar to the type, size and Complexity as specified in the schedule of requirement upto at least 3Nos. to any Government Organization(End user) in any one of the last three financial years2023-24 to 2025-26)(Necessary supply orders, performance certificates and 3rd party inspection certificates are to be enclosed).

OR

c) i. In case of Micro, Small & Medium Enterprises as per G.O, the tenderer should enclose relevant Certificate issued by Competent

Authority in the absence of which the tenderers will not be considered for further evaluation.

ii. If the tenderer be a Micro & small Enterprises as per G.O, must have manufactured, tested and supplied 6000ltr and above the Combination machines similar to the type, size and complexity as specified in the schedule of requirement upto at least 4Nos. of Combination machines to any Government organization (End user) in any one of the last two financial year(2024-25 to 2025-26) (Necessary supply orders Performance Certificates and 3rd party inspection certificates are to be enclosed)

2) The Tenderer (Manufacturer/ Dealer) should possess annual financial turnover of Rs.929.60lakhs during the last three preceding financial years (2023-24 to 2025-26).

Based on G.O, for Micro & Small Enterprises should possess a annual financial turnover of Rs.232.40 Lakh during the last 2 preceding financial year(2024-25 to 2025-26).

3) The tenderers participating in the above tender has a reputed manufacturer or authorized dealer should have the experience of Equipment Maintenance of minimum 5 Nos. Combination machines in any one of the last five financial years (2021-22 to 2025-26).

4) The Tenderer should demonstrate the availability of Liquid Assets and/or availability of Credit Facility of not less than Rs.139.44Lakh(Credit Line/Letter of Credit/Certificates from Nationalised /Scheduled Bank)

5) Tenderer shall possess an Assessed Available Tender Capacity (AxN-B) not less than 8Nos. suctions cum jetting Machine,

Where,
A=Licenced capacity for manufacturing of Vehicle.
N=Number of years prescribed for completion of supplies for which tenders are invited. i.e., 12 months
B= Number of existing commitments to be supplied during the next 1 year.

6) The tenderer must have ISO 9001 and 14001 certifications with validity since last one year. Latest audited certification must be submitted.

7) Documentary evidence showing authorized service centre with registration of certificate with a Bangalore city limits.

8) Trade certificate issued by RTO, Government of Karnataka.

Sl. No	Particulars	Amount put to tender	EMD	Contract Period
1.	Procurement of 8Nos of Suction Cum Jetting Machines of 6000 liters capacity (to carry 4000	Rs.4,64,80,000/-	Rs.6,97,200/-	12 months

	liters of water and 2000 liters of sewage) to be mounted on suitable BS-VI chassis provided by Board including equipment maintenance for 5years+one year Warranty period.			

The last date & time for receipt of tenders in the Electronic Tender Box in website (www.kppp.karnataka.gov.in) is on 10.08.2026 before 16:00Hrs and the Technical Bids will be opened on 11.08.2026 at 17:00Hrs.

- Tenderers may obtain further information from the office of the Purchaser, at the following address:
  Office of the Chief Engineer(IP, R&D), Bangalore Water Supply and Sewerage Board; 3rd floor, Cauvery Bhavan, K G Road,
  Bangalore - 560 009.

Corrigendum / Modification / Corrections, if any will be published in the website only.

Sd/-
Chief Engineer(IP, R&D)